

Winterising a Boat: Engine, Water System and Cover

Seasonal · Intermediate · 1 day

Almost all winter damage is water freezing where it should not be, or damp sitting in a sealed boat for five months. An unhurried day in autumn prevents a cracked engine block and a boat full of mould in spring.

Tools and materials

- ☐ Non-toxic propylene glycol antifreeze
- ☐ Engine antifreeze tested to the correct concentration
- ☐ Fuel stabiliser and a biocide for diesel
- ☐ Fresh engine oil and filters
- ☐ Breathable cover or tarpaulin and battens
- ☐ Dehumidifier crystals or a low-power tube heater

1. Change the oil before layup, not after

- ☐ Used oil is acidic and will pit bearings if it sits in the engine all winter. Run the engine to warm it, drain the oil hot, change the filter and refill.
- ☐ Run the engine for a minute afterwards so clean oil coats everything internally.

2. Protect the cooling system

- ☐ On a raw-water-cooled engine, shut the seacock, drop the intake hose into a bucket of antifreeze mix and run the engine until coloured fluid comes out of the exhaust.
- ☐ On an indirect system, test the freshwater side with a hydrometer and top up the coolant concentration, then run antifreeze through the raw-water side the same way.
- ☐ Remove the impeller for the winter, or at least note that it has been sitting compressed — many people replace it every spring for exactly this reason.

3. Fuel: full or empty, not half

- ☐ Fill the diesel tank almost to the top. Air space is where condensation forms, and water in diesel feeds the bug.
- ☐ Add stabiliser and, for diesel, a biocide. Change the fuel filters now so you start the season clean.
- ☐ Petrol outboards are the opposite: run the carburettor dry or use stabiliser, because modern petrol goes off and gums up jets within months.

4. Drain the freshwater and heads

- ☐ Drain the freshwater tank, pump and calorifier, then pump non-toxic antifreeze through every tap, the shower and the sink drains until it runs pink.

- ☐ Flush the heads with fresh water, then draw antifreeze through the bowl, pump and outlet hose. Frozen heads are the most common and most unpleasant spring surprise.

5. Batteries and electrics

- ☐ A flat battery freezes; a charged one does not. Either leave the bank on a smart maintenance charger or take the batteries home and top them up monthly.
- ☐ Disconnect the negative terminal to kill parasitic drains, and spray the terminals with a protective grease.

6. Ventilate, then cover

- ☐ Open every locker, lift berth cushions on edge, prop the fridge door and leave lockers ajar so air moves through the boat.
- ☐ Use a breathable cover on a frame that sheds water and does not chafe. A cheap plastic tarpaulin drum-tight against the hull traps condensation and does more damage than no cover at all.
- ☐ Leave vents open. A sealed boat grows mould even in a dry winter.

Notes
